

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A heat exchanger, in particular a charge-air cooler for motor vehicles, in particular for utility vehicles, with a heat exchanger unit (2), which comprises tubes (5) having tube ends and in particular fins (6) arranged between the tubes (5), and at least one laterally arranged header box (3,4) for introducing or discharging a medium, the at least one header box (3,4) having a bottom with openings for receiving the tube ends, a cover and an inlet or outlet connecting pipe (7,11), ~~characterized in that~~ wherein the header box (3,4) is at least partially produced by internal high-pressure forming (IHF) of a metallic semifinished product.
2. (Currently amended) The heat exchanger as claimed in claim 1, ~~characterized in that~~ only the cover is produced by IHF and is welded to the bottom.
3. (Currently amended) The heat exchanger as claimed in claim 2, ~~characterized in that~~ wherein the semifinished product is a rolled aluminum sheet.
4. (Currently amended) The heat exchanger as claimed in claim 1, ~~characterized in that~~ wherein only the cover and the bottom are produced as a single piece from a semifinished product by IHF and are connected to the connecting pipe (7,11) with a cohesive material joint, in particular are welded or soldered thereto.
5. (Currently amended) The heat exchanger as claimed in claim 1, ~~characterized in that~~ the bottom, the cover and the connecting pipe are produced as a single piece by IHF.
6. (Currently amended) The heat exchanger as claimed in claim 4 ~~or 5, characterized in that~~ 4, wherein the semifinished product is an extruded aluminum tube.

7. (Currently amended) The heat exchanger as claimed in claim ~~5 or 6~~, ~~characterized in that~~ 5, wherein the connecting pipe (~~7, 11~~) is prebent before the IHF process.
8. (Currently amended) The heat exchanger as claimed in ~~one of claims 4 to 7~~, ~~characterized in that~~ claim 1, wherein a part (~~9~~) of the cover of the header box (~~4~~) has a longitudinal bead (~~10~~) produced by pressing (from the outside) and/or IHF (from the inside).
9. (Currently amended) The heat exchanger as claimed in claim 8, ~~characterized in that~~ the longitudinal bead (~~10~~) is of conical design and has a cross section (~~10a~~) which increases in a direction pointing away from the connecting pipe (~~7~~) while the cross-sectional area (~~17~~) of the header box (~~4~~) decreases.
10. (Currently amended) The heat exchanger as claimed in ~~one of claims 1 to 9~~, ~~characterized in that~~ claim 1, wherein, after the IHF process, the header box (~~4~~) has at least one open end surface (~~13~~) which is closed by a cover (~~14~~) which can be soldered into place.
11. (Currently amended) The heat exchanger as claimed in ~~one of claims 4 to 10~~, ~~characterized in that~~ claim 4, wherein the openings in the bottom (~~15~~) are produced by punching, in particular by punching counter to a hydraulic internal high pressure.
12. (Currently amended) The heat exchanger as claimed in ~~one of claims 4 to 10~~, ~~characterized in that~~ claim 4, wherein the openings in the bottom (~~15~~) are produced by prepunching before the IHF and/or by drawing through, in particular drawing through counter to a hydraulic internal high pressure.
13. (Currently amended) The heat exchanger as claimed in ~~one of the preceding claims~~, ~~characterized in that~~ claim 1, wherein the header box has a wall thickness which, at least in some regions, preferably for the most part, is greater than 2 mm, in particular greater than 3 mm.

14. (Currently amended) The heat exchanger as claimed in ~~one of the preceding claims,~~ characterized in that claim 1, wherein the header box has a wall thickness which, at least in some regions, preferably for the most part, is smaller than 5 mm, in particular smaller than 4 mm.

15. (Currently amended) The heat exchanger as claimed in ~~one of the preceding claims,~~ characterized in that claim 1, wherein the bottom has a curvature which, at least in some regions, preferably for the most part, has a radius of curvature greater than 100 mm, in particular greater than 200 mm.

16. (Currently amended) The heat exchanger as claimed in ~~one of the preceding claims,~~ characterized in that claim 1, wherein the bottom has a curvature which, at least in some regions, preferably for the most part, has a radius of curvature smaller than 400 mm, in particular smaller than 300 mm.

17. (Currently amended) The heat exchanger as claimed in ~~one of the preceding claims,~~ characterized in that claim 1, wherein the bottom in the transition region to the cover has a curvature which, at least in some regions, preferably for the most part, has a radius of curvature greater than 5 mm, in particular greater than 10 mm.

18. (Currently amended) The heat exchanger as claimed in ~~one of the preceding claims,~~ characterized in that claim 1, wherein the bottom in the transition region to the cover has a curvature which, at least in some regions, preferably for the most part, has a radius of curvature smaller than 20 mm, in particular smaller than 15 mm.

19. (Currently amended) The heat exchanger as claimed in ~~one of the preceding claims,~~ characterized in that claim 1, wherein the header box, at least in some regions, preferably for the most part, has a step- and/or kink-free cross section.

20. (Currently amended) The heat exchanger as claimed in ~~one of the preceding claims,~~
~~characterized in that~~ claim 1, wherein a connecting pipe is designed as an end-side extension
of the header box and in particular is curved.

21. (Currently amended) The heat exchanger as claimed in ~~one of the preceding claims,~~
~~characterized in that~~ claim 1, wherein a connecting pipe is arranged laterally on the header
box.